



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,273	09/18/2000	Jean-Claude Constantin	32978	4537

116 7590 01/10/2007
PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER

LAO, LUN S

ART UNIT	PAPER NUMBER
----------	--------------

2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/664,273

Applicant(s)

CONSTANTIN, JEAN-CLAUDE

Examiner

Lun-See Lao

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Introduction

1. This action is in response to the amendment filed on 10-24-2006. Claims 1, 11 and 14 have been amended and claim 2 has been canceled. Claims 1 and 3-20 have been pending.

Claim Objections

2. Claim 5 is objected to because of the following informalities: claim 5 recite "Method as claimed in claim 2 ", IT appears that it is more proper that if they depend on claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Morales-Garza (PAT. 5,257,099).

Consider claim 11 Morales-Garza teaches that a wireless transmission system comprising (see fig.5):

A hearing device (such as a Television (5F)) a receiver comprising an antenna (5C);

at least one transmitter (5B (such as fig.6));

Art Unit: 2615

a signal which is modulated in at least one of amplitude, frequency and phase (see col. 4 line 20-44), the signal being transmitted wirelessly through an information channel from one of the at least one transmitters to the receiver (see fig.6 (5BF, 5BG, and 5BB, 5BH)),

means (see fig.6 (5BC)) for generating and transmitting configuration parameters (such as, select different TV channel), and the parameters being transmitted independent of configuration the signal and wirelessly through a control channel independent (between 5G and 5BH) of the information channel; and

means (5BC) for receiving and processing the configuration parameters, said means (5BH) being provided in the receiver (see col. 4 line 66-col.5 line 17).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-5, 14, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morales-Garza (US PAT. 5,257,009) in view of Mayo (US PAT. 5,133,081).

Consider claim 1, Morales-Garza teaches that a method to control a transmission system comprising at least one transmitter and at least one receiver (see fig.6, (5BB, 5BF)), the method comprising the steps of:

Art Unit: 2615

Transmitting (5BF, 5BG) a signal wirelessly through an information channel (see col. 4 line 20-43),

transmitting an code (such as a number of channel) and configuration parameters (such as, channels select information (cnn, abc)) wirelessly through a channel (between, 5G, 5BH), independent of the signal transmitted through the information channel, the code being assigned to the at least one receiver (5BH,5BC) and

In response to receiving the code by the at least one receiver (5BH,5BC) implementing adjustments (see fig.6. (5BC))) in the at last one receiver according to the configuration parameters to cause the at least one receiver (5BH, 5BC) to tune to the information channel (such as TV channel and col.4 line 66-col. 5 line 17); but Morales-Garza does not explicitly teach an identification code.

However, Mayo teaches an identification code (see fig.5 and col. 8 line 10-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Mayo into the teaching of Morales-Garza to provide more security and more convenience to the user for recording in the V.C.R . system.

Consider claim 3-4, Morales-Garza teaches that the receiver (see fig. 6, (5BB, 5BH)) is programmed by a configuration unit (5BC), and wherein programming data for programming the configuration unit is transmitted through the channel (col.4 line 66-col. 5 line 17); and the information is transmitted from the receiver (5BB, 5BH) through the channel to the configuration unit (5BC and see col.4 line 66-col. 5 line 17).

Art Unit: 2615

Consider claim 5, Morales-Garza teaches that one or more identification codes (see fig. 8) are addressed to a plurality of receivers (such as, 5BH received a code from the controller (5G) and address 5BC to select a channel from the receiver (5BB) and see col.4 line 66-col. 5 line 17).

Consider claims 18-19, Morales-Garza teaches that the control channel (see fig.6, between 5G and 5BH) is separate from the information channel (5A and see col. 4 line 66-col. 5 lines 17); and the control channel (see fig.6, between 5G and 5BH) has a carrier frequency different from a carrier frequency of the information channel (5A and see col. 4 line 66-col. 5 lines 17).

Consider claim 14, Morales-Garza teaches a receiving device comprising: a receiver (see fig.6, (5BB)) for receiving signals (see col.4 lines 20-44) which are modulated in at least one of frequency and phase, the signals being received at an antenna (5A) connected through a filter-amplifier (see fig.7 (7A, 7B)) unit and a consecutive mixer (see fig.7, &7C, 7H)) to a demodulator (see fig.7, (5BB)) to generate demodulated signals based on configuration parameters (5BC), the mixer (7C, 7H) being loaded with the an output signal from a synthesizer which is controlled by a control unit (5BC and see col. 5 line 18-57), and transceiving means for wirelessly receiving the configuration parameters (by (microprocessor, 5BC)), independent of a signal received by the receiver (see fig.6, between 5G and 5BH); and transceiving means (see fig.6, between 5G and 5BH) being connected to the control unit (5G and see col. 4 line 66-col. 6 line 17); but Morales-Garza does not explicitly teach an identification code assigned to the receiver.

However, Mayo teaches an identification code assigned to the receiver (see fig.5 and col. 8 line 10-68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Mayo into the teaching of Morales-Garza to provide more security and more convenience to the user for recording in the V.C.R . system.

7. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morales-Garza (US PAT. 5,257,009) in view of Anderson (US PAT. 5,721,783).

Consider claim 12, Morales-Garza does not clearly teach that the means for generating and transmitting the configuration parameters are provided in at least one of a remote control, a transmitter, a control unit connected to a loop antenna.

However, Anderson teaches that the means (see fig.9) for generating and transmitting the configuration parameters (916, 924, 928) are provided in at least one of a remote control (see fig.2 (22 by signal F1))), a transmitter (see fig.1, (22, (F1))), a control unit (23) connected to a loop antenna.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Anderson into Morales-Garza to provide communication system to use a loop antenna for improving communication system in the short range.

Consider claim 13 Anderson teaches a configuration unit (see fig.9, 948 and see col.21 line 30-col. 22 line 61); and transmission system of the receiver is connected to

Art Unit: 2615

at least one of a hearing aid and an electro-acoustic transducer (see fig.1 and abstract).

8. Claims 6-10, 15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morales-Garza (US PAT. 5,257,009) as modified by Mayo (US PAT. 5,133,081) as applied to claims 1 and 14, above and further in view of Anderson (US PAT. 5,721,783).

Consider claim 6, Morales-Garza and Mayo do not clearly teach that the demodulation of the signal based on the configuration parameters is carried out using a generated frequency to produce at least one demodulated signal, and wherein the at least one demodulated signal is fed to another processing unit, of at least one of a hearing aid or an electro-acoustic transducer.

However, Anderson teaches that the demodulation of the signal based on the configuration parameters (see fig.9 (948)) is carried out using a generated frequency to produce at least one demodulated signal, and wherein the at least one demodulated signal is fed to another processing unit (see fig.8 and see col. 21 line 30-col. 22 line 61), of at least one of a hearing aid or an electro-acoustic transducer (see fig.1 and col. 21 line 30-col. 22 line 61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Anderson into Morales-Garza and Mayo to provide a wireless communication hearing system which can provide accurate decoded signals to the user.

Art Unit: 2615

Consider claim 7, Anderson teaches a total transfer function resulting from the transmitter and the receiver (see fig.9) is modified in the receiver (900,960,970) by transmitting transfer function (such as least mean squares) parameters of the transmitter through the channel to the receiver, said transfer-function parameters comprising amplification and frequency of transmission and wherein the transfer function of the receiver (900, 960, 970) is modified in relation to a desired total transfer function (col. 27 line 25-col. 29 line 17).

Consider claims 8-10, Anderson teaches that an antenna (see fig.8, 40) receiving the modulated signal is tuned to a particular transmission frequency (see col. 11 line 19-col.12 line 46); and the transmission through the channel is carried out using FSK (frequency shift keying) modulation (see col. 11 line 1-18 and see the discussion above of claim 1); and the audio signals are transmitted from the transmitter to at least one receiver (fig. 2) wherein the at least one receiver is connected to at least one of a hearing aid and an electro-acoustic transducer (see col. 11 line 19-col.12 line 46).

Consider claim 20 Anderson teaches that configuration parameters (see fig.9 916, 924, 928) comprise and the carrier frequency of the information identification of channel (see fig.9 and col.8 line 53-col. 9 line54).

Consider claim 15, Morales-Garza and Mayo do not clearly teach that the transceiving means comprises a transceiver, a transceiving coil and a capacitor to adjust the transceiving coil.

Art Unit: 2615

However, Anderson teaches that the transceiving means (see fig.4, 40) comprises a transceiver (40), a transceiving coil (41,42) and a capacitor to adjust the transceiving coil (see fig.4, 42, 41 and col. 11 line 19-col. 12 line 46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Anderson into Morales-Garza and Mayo, since it is one of the well-known transceiving circuits which can enhance the communication system operation.

Consider claim 17, Anderson teaches a hearing aid comprising the receiver (see fig.1 and col. 27 lines 4-24).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morales-Garza (US PAT. 5,257,099) as modified by Mayo (US PAT. 5,133,081) as applied to claims 1 and 14 above, and further in view of Schotz (WO 97/29550).

Consider claim 16. Morales-Garza and Mayo do not clearly teach an integrated circuit on a CMOS chip, the integrated circuit comprising the filter-amplifier unit, the mixer, the demodulator, the synthesizer and the control.

However, Schotz teaches an integrated circuit on a CMOS chip, the integrated circuit comprising the filter-amplifier unit (see fig. 3a, 138, 154), the mixer (168), the demodulator (168), the synthesizer (160) and the control unit (see fig. 3b, 164 and see page 14 line 34-page 35 line 26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Schotz into the teaching of

Art Unit: 2615

Morales-Garza to provide a two wireless channel communication system which can be more compact and more economic to be made.

Response to Arguments

10. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2615

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao,Lun-See L.S.
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
Date 01-04-2007


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600